



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/719,940	04/04/2001	Jurgen Kockmann	P00,1886	5311
29177	7590	08/19/2004	EXAMINER	
BELL, BOYD & LLOYD, LLC P. O. BOX 1135 CHICAGO, IL 60690-1135			MEEK, JACOB M	
			ART UNIT	PAPER NUMBER
			2637	18

DATE MAILED: 08/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/719,940

Applicant(s)

KOCKMANN ET AL.

Examiner

Jacob Meek

Art Unit

2637

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04/04/2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 - 12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 April 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                                                                                 |                                                                                         |
|-------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                                                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                                            | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>6.04/04/01</u> . | 6) <input type="checkbox"/> Other: _____                                                |

## DETAILED ACTION

### *Priority*

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1 – 4, and 7 - 10 are rejected under 35 U.S.C. 102(e) as being anticipated by Ohashi et al (US Patent 6,240,261).

With regard to Claim 1, Ohashi teaches a method of offering a table with a plurality of N possible carrier frequency values  $f_x$  in addresses 1 through N of the table (see Figure 4, where L is equivalent to N)), [whereby] the N possible carrier frequency values being [are] arranged in n sub-groups (see Figure 7(b), where K is equivalent to n); generating a sequence of random values (see Figure 7(c) and (Figure 6, S12); reading out at least a part M of the N carrier frequency values  $f_x$  from the table, [whereby] the carrier frequency values within each sub-group being [are] read out from the corresponding addresses on the basis of the generated sequence of random values and the sub-groups are read out in a discontinuous sequence, [whereby]  $M \leq N$  applies (see Figure 7(c), Figure 6, S13 and S14); and transmitting information in the corresponding carrier frequencies (see Figure 6, S15).

With regard to Claim 2, Ohashi teaches a method of converting said sequence of random values into corresponding address values in the respective sub-group with which the carrier frequency values are read from the respective sub-groups of the table (see Figure 6, S11 – S15).

With regard to Claim 3, Ohashi teaches a method of sampling a carrier frequency (See Figure 12, S201); deciding whether a specific message was received on said carrier frequency during a specific time span (See Figure 12, S202); when the deciding step is negative, selecting a new carrier frequency and sampling said new carrier frequency (see S202 – S206, S208); when the deciding step is positive, generating the sequence of random values upon employment of the message (see Figure 6, S202, S204, S209).

With regard to Claim 4, Ohashi teaches a method of sampling a carrier frequency (See Figure 12, S201); deciding whether a specific message was received on said carrier frequency during a specific time span (See Figure 12, S202); when the deciding step is negative, selecting a new carrier frequency and sampling said new carrier frequency (see S202 – S206, S208); when the deciding step is positive, generating the sequence of random values upon employment of the message (see Figure 6, S202, S204, S209).

With regard to Claim 7, Ohashi teaches an apparatus supporting a table with a plurality of N possible carrier frequency values  $f_x$  in addresses 1 through N of the table (See Figure 1, block 26 and see Figure 4, where L is equivalent to N), the N possible carrier frequency values being [are] arranged in n sub-groups (see Figure 1, block 35a and see Figure 7(b), where K is equivalent to n); generating a sequence of random values (see Figure 1 block 35c, see Figure 7(c), and (Figure 6, S12); reading out at least a part M of the N carrier frequency values  $f_x$  from the table, the carrier frequency values within each sub-group being read out from the corresponding addresses on the basis of the generated sequence of

random values and the sub-groups are read out in a discontinuous sequence, [whereby]  $M < N$  applies (see Figure 7(c), Figure 6, S13 and S14); and transmitting information in the corresponding carrier frequencies (See Figure 1, and see Figure 6, S15).

With regard to Claim 8, Ohashi teaches an apparatus for converting said sequence of random values into corresponding address values in the respective sub-group with which the carrier frequency values are read from the respective sub-groups of the table (see Figure 6, S11 – S15 and Figure 1).

With regard to Claim 9, Ohashi teaches an apparatus for sampling a carrier frequency (See Figure 12, S201 and Figure 1); deciding whether a specific message was received on said carrier frequency during a specific time span (See Figure 12, S202 and Figure 1); when the deciding step is negative, selecting a new carrier frequency and sampling said new carrier frequency (see Figure 12, S202 – S206, S208 and Figure 1); when the deciding step is positive, generating the sequence of random values upon employment of the message (see Figure 6, S202, S204, S209 and Figure 1).

With regard to Claim 10, Ohashi teaches an apparatus for sampling a carrier frequency (See Figure 12, S201 and Figure 1); deciding whether a specific message was received on said carrier frequency during a specific time span (See Figure 12, S202 and Figure 1); when the deciding step is negative, selecting a new carrier frequency and sampling said new carrier frequency (see S202 – S206, S208 and Figure 1); when the deciding step is positive, generating the sequence of random values upon employment of the message (see Figure 6, S202, S204, S209 and Figure 1).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2637

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 5, 6, 11, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohashi et al (US Patent 6,240,261) in view of Almgren et al (6,298,081).

With regard to claims 5 and 11, Ohashi teaches the limitations of Claim 1 as above. Ohashi fails to teach the use of unused frequencies to replace disturbed channels. Almgren teaches a method (and by extension an apparatus) for reading out a part  $j$  of  $k$  possible carrier frequency values from each sub-group of the table (see Figures 3A – 3C for table implementations), the remaining  $k - j$  carrier frequency values in the respective sub-group being employed for replacing disturbed carrier frequency values of the  $j$  carrier frequency values,  $k \times n = N$  and  $j \times n = M$  apply (see Figure 7 for recalculation operation, blocks 707, 708, 709). It would have been obvious to one skilled in the art to combine the system of Ohashi with the system of Almgren to produce a with superior performance (see Almgren, Column 6 line 61 through Column 7 line 2)

With regard to claims 6 and 12, Ohashi teaches the limitations of Claim 1 as above. Ohashi fails to teach the updating of the sub-groups of the table from the carrier frequency values. Almgren teaches a method (and by extension, and apparatus) for updating each sub-group of the table is updated (see Figure 7, step 708, 709) from the  $k - j$  carrier frequency values before the reading out step upon replacement of the carrier frequency values that correspond to disturbed carrier frequencies. It would have been obvious to one skilled in the art to combine the system of Ohashi with the system of Almgren to produce a with superior performance (see Almgren, Column 6 line 61 through Column 7 line 2).

**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacob Meek whose telephone number is (571)272-3013. The examiner can normally be reached on 8:00 - 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on (571)272-2988. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JMM

TEMESCHEN GHEBRETINSAE  
PRIMARY EXAMINER  
8/18/09